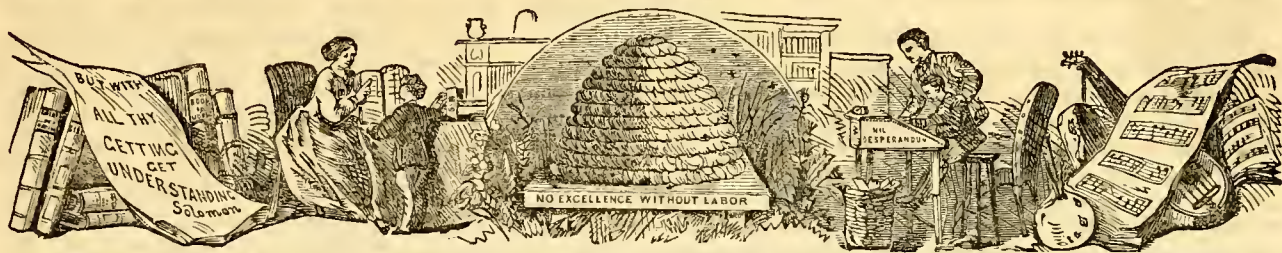


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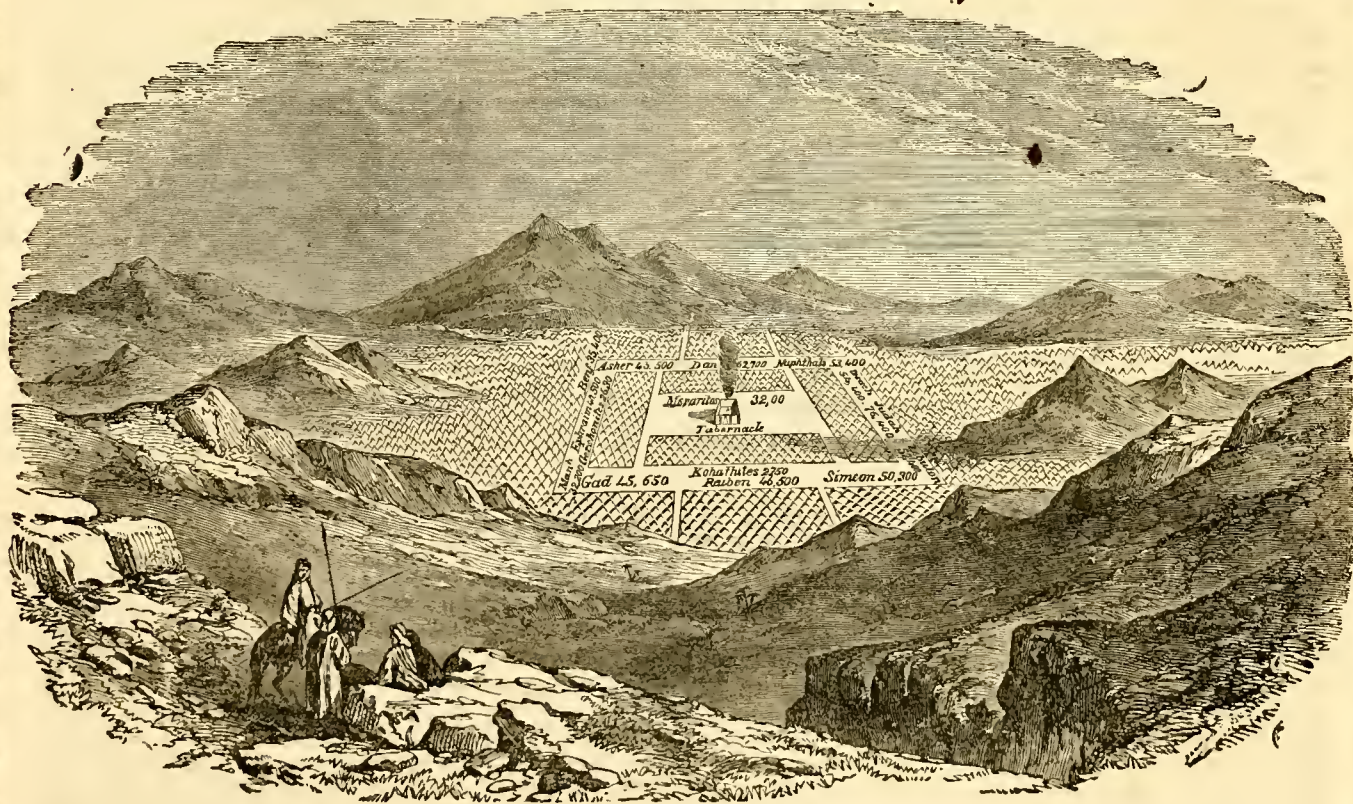
NO. 16.

## THE CAMP OF ISRAEL.

IN the engraving below we have the view of an extensive valley, bounded by hills and mountains, in which thousands of tents are pitched. It is a view of the camp of the children of Israel in the wilderness, while journeying, under the direction of Moses, from Egypt to the Promised Land. This engraving is only intended as a representation of the camp. We do not suppose that if a picture had been taken by some person who was with Moses and the children of Israel at that time, and it had been preserved until now, that it would have looked like the picture below. But this is drawn

to be their representatives. Each one of them was the head of the house of his fathers.

The tribes did not all number alike. Some were more numerous than others. Judah was the largest tribe. There were 74,600 men over the age of twenty years in that tribe. Manasseh was the smallest tribe of the twelve. The men of that tribe numbered 32,200. "But," you ask, "how came Manasseh to be counted as one of the tribes, when he was not one of the sons of Jacob, but his grandson? Did not Jacob have twelve sons of his own without counting Manasseh?"



from the imagination, after reading the description of the camp as given by Moses.

The children of Israel were camped in the wilderness of Sinai, and on the first day of the second month, in the second year after they came out of the land of Egypt, the Lord spake unto Moses and commanded him to count all the men among them who were twenty years old and upwards. He selected twelve men, one from each of the tribes, to stand with Moses

Yes, Jacob had twelve sons of his own. Before he died he was visited by his son Joseph, who took with him his two sons, Manasseh and Ephraim. Jacob told Joseph on that occasion that he claimed as his own the two sons of Joseph, Manasseh and Ephraim, who were born in Egypt before Jacob went unto him there. They were to be counted among his sons just the same as if they were his own boys. He blessed them, and in blessing them, he placed Ephraim, who was the younger of



the two, before Manasseh, and said he should be the greater. These two sons of Joseph, added to the twelve, made fourteen of Jacob's sons; but, in numbering the tribes, Joseph was not counted; his two sons were counted in his stead. Neither was Levi counted.

We will explain to you why Levi was not counted among the rest of the tribes. You recollect that before the Lord delivered the children of Israel out of Egypt, He showed many signs and wonders unto Pharaoh, who was the king of that land. Among the rest of the signs, and the one that appeared to have the greatest effect upon the obstinate and hard heart of the king, was the killing of all the first-born in Egypt. There was not a house where there was not one dead—from the first-born of Pharaoh, who was the king, unto the first-born of the captive that was in the dungeon; and all the first-born of cattle were killed also. At that time the Lord hallowed unto himself all the first-born in Israel—both man and beast—to be His service. He claimed them for his service; but instead of requiring the people of the various tribes to set apart their first-born for His service, He took the tribe of Levi and called them His; and He took their cattle instead of the first-born cattle of the other tribes. He commanded Moses to take the Levites and give them unto Aaron and his sons. They were to perform all the service of the tabernacle, under the direction of Aaron and his family, and were assigned their duties and the charge of the tabernacle, the instruments of the tabernacle, the ark, and everything connected with the sanctuary and the worship of the Lord.

Then the Lord commanded Moses to count all the males of the tribe of Levi from a month old and upward. He did so, and he found that they numbered 22,000. It seems that Levi was a much smaller tribe than any of the rest. Manasseh numbered 32,200 even when the boys under twenty years of age were not counted. Moses then counted the first-born of the males of all the tribes of Israel. And all the first-born males, from a month old and upward, of the other tribes, were 22,273. You see the first-born males in Israel numbered 273 more than the Levites. Then the Lord told Moses these extra ones, over and above the number of the Levites, would have to be redeemed. The price of their redemption was five shekels apiece. A shekel amounted to about half a dollar. The whole amounted to about six hundred and eighty-two dollars and fifty cents, which the Lord told Moses to pay over to Aaron and his sons. From these explanations you will understand that Joseph and Levi were not counted among the tribes; but Ephraim and Manasseh were. They made the twelve tribes complete.

The males over twenty years of age of all the tribes, not counting the Levites, numbered 603,550. You can understand that it required a large number of tents for such a host and their women and children. The Lord gave them directions how they were to camp, so that the tribes might know their places and go to them without any confusion. Every man was required to pitch his tent by his own standard, with the ensign of his father's house. In the first rank; and the ones to set forth first, were Judah, Issachar and Zebulun. This was the camp of Judah, and as you see by the engraving, these tribes camped together on the east side of the tabernacle. The second camp was that of Reuben. It was composed of the tribes of Reuben, Simeon and Gad, and occupied the second rank. These tribes camped on the south side. The third rank was the camp of Ephraim, composed of the tribes of Ephraim, Manasseh and Benjamin. They camped on the west side. The camp of Dan came next; his was the fourth or hindmost rank. It comprised the tribes of Dan, Asher and Naphtali. Their place of camping was on the north side.

In traveling, the tabernacle of the congregation, with the camp of the Levites, went between the two first and the two last ranks, so as to be in the midst of the armies. In camping, the tabernacle and camp of the Levites, as you see in the engraving, were in the centre. Levi had three sons—Gershon, Kohath and Merari. The Gershonites were told to pitch their tents behind the tabernacle westward. The Kohathites pitched their tents on the side southward. The Merarites pitched theirs on the side northward. Thus the Levites were inside the armies and immediately around the tabernacle. Moses and Aaron and his sons encamped before the tabernacle on the east, to keep charge of the sanctuary. If any stranger were to come nigh unto the tabernacle, he was to be put to death.

The Lord was very particular in directing what Aaron and his sons, and what each family of the Levites should do. In some future number we may write some very interesting particulars, showing you how God honored Aaron and his sons before all Israel, which we can not write now for the want of space.

In the engraving which we give you, the figures given as the number of men in the tribe of Judah, Simeon and Asher have been put down incorrectly by the engraver. The correct figures are Judah 74,600, Simon 59,300 and Asher 41,500.

## THE STORY OF AMERICAN HISTORY.

*Selected from Jacob Abbott's Writings.*

**R**ALEIGH made several different attempts to establish colonies in the country, and sent at different times many ships, with fresh supplies of men and stores. The people who went met with a great variety of adventures, and endured indescribable hardships and sufferings. Raleigh himself finally became entirely discouraged, and determined to give up the attempt. In the mean time, however, a great many people in England had become interested in the plan of settling America, and, after several years had passed away, and the difficulties and hardships of Raleigh's expeditions had been in some measure forgotten, two companies of merchants were formed with the design of attempting the experiment again. Queen Elizabeth, in the mean time, had died, and King James the First succeeded her. The companies that were formed were organized under powers given them by the king and they were to be under the general control of the king's government. The name of the company that intended to make a settlement in Virginia was the London Company. It was so named because London merchants chiefly were engaged in it.

The London Company sent their first expedition to Virginia in 1606. It consisted of three small vessels, containing a colony of one hundred and five men. They did not know, when they sailed, who were to be the rulers of the colony. That was for the king to decide. He had written, he said, the names of the persons who were to rule on a paper, which he had put in a box and sealed up. He gave the box to the captain of one of the ships, forbidding him to open it until the expedition should arrive in America. What reason the king could have had for such a foolish restriction as this, one can not imagine, unless it was the pleasure of exercising arbitrary power, and showing the colonists how completely subject they were to his control.

Among the other members of this company was one man who afterwards became greatly celebrated in Virginian history on account of his daring and desperate spirit, and the romantic adventures that he met with in the colony. From his earliest youth he was very wild and reckless. He attempted to run



away when he was a boy in order to go to sea, and sold his school-books in order to raise money. He was stopped, however, before he got away, and was bound apprentice to a merchant. He yielded to this plan at first, in hopes that the merchant would send him to sea; but, as soon as he found that this was out of the question, he left the merchant and went off himself to the Continent. He was then about fifteen years old. He roamed about the world after this for ten years, during which time he met with a series of the most remarkable adventures, and had a great many hair-breadth escapes. At last he came back to England, and when this company was formed for going to Virginia, he concluded to join them. His name was on the list that the king had nominated for the council, though none of the colonists knew this until they arrived in America.

On the voyage the colonists quarreled among themselves and had a great deal of difficulty. They all took a strong dislike to Smith. They accused him of forming a plot to murder the council when their names should be revealed, in order to make himself king of the colony. Smith was a man of fine judgment. He had a broad and capacious mind. He was a master spirit and his companions could not comprehend his views. They seized him and put him in irons, and kept him confined during all the rest of the voyage. When they landed, they seemed, from some cause or other, to relent, and they accordingly released him from his confinement, but they would not allow him to retain his office as councilor.

As soon as the company landed, and began to choose a place for their settlement, and to commence their preliminary labors, they found themselves involved in many difficulties. These difficulties were increased by continual disputes and disagreements with each other, and the courage and the energy that Smith displayed in these circumstances were so great that he soon made himself the real leader of the enterprise. In fact, he was one of those men who will lead wherever they are, and whose resolution and energy rise higher and higher in proportion to the dangers and difficulties that surround them.

The ships that had brought the colonists went back to England, but they returned again the next year with fresh supplies and more men. The colonists had suffered dreadfully during the interval while the ships were gone, but now they were relieved, and the settlement was considered as permanently established.

Captain Smith, as he was called, now conceived the design of making an exploring tour into the interior of the country. He was never content unless he was engaged in some daring or dangerous enterprise, and so, as soon as he and his companions were safe from the danger of immediate starvation, he formed this plan, which promised enough of difficulty and hazard to suit his adventurous spirit. He took an open boat and a few companions like himself, and set out. He had two friendly Indians with him to serve as guides.

He went on up the river for about fifty miles. Then the water became so shallow that he could not go any farther in the boat, so he left the boat, with some men to guard it, and set off himself, with his guides and two companions, to continue his journey on foot. He went on for some distance safely, but at last his party was attacked by a troop of savages that burst upon them suddenly out of a thicket. The savages had seen the boat, killed the men who had been left to guard it, and now had tracked Smith and his party to this place.

At the time when they came up, Smith's two companions were asleep by their camp-fire. The Indians killed these men instantly, and then pursued Smith, and when they came up with him, they surrounded him and wounded him with an arrow. Smith immediately fastened one of his guides to his left arm, and held him there as a shield to keep off the arrows of the

Indians, and then, with his gun, he killed three of the foremost of his assailants one after another, retreating all the time as he fired, in hopes of making his way back to his canoe. Presently, however, he came to a swampy place in the ground, and there sank in the mire so that he became entirely helpless, and then the Indians came up and made him prisoner.

The savages took their prisoner to their wigwams, and began to treat him at once with the greatest kindness and consideration. They gave him an abundance to eat and drink, and showed him all other possible favors. Smith was at first frightened at this. He thought that they were going to eat him up and eat him. He found out, at last, that their plan was to induce him to become their ally and leader, and to aid them in an attempt that they were going to make to surprise and destroy the English settlement. But Smith gave them to understand that it was useless for them to think of such a thing. The settlement was strongly fortified, he said, and provided with dreadful engines of destruction, the nature of which he contrived to explain to them in some degree by the help of his musket, so that all attempts on their part to destroy it would be vain.

(To be Continued.)

## "OUR MOTHER."

Our mother's lost her youthfulness;  
Her locks are turning grey;  
And wrinkles take the place of smiles;  
She's fading every day.  
We gaze at her in sorrow now,  
For though we've ne'er been told,  
We can but feel the sadd'ning truth,  
Our mother's growing old.

Our mother's lost her youthfulness;  
Her smiles are just as kind,  
Her tones to us are soft as erst;  
Where should we dearer find?  
But, as we note the trembling tongue,  
And mark the stooping form,  
A sad voice whispers to our hearts,  
Ye cannot keep her long.

ROSES.—Girls, do you love roses? Of course you do. A girl who did not would be a sort of heathen, certain to develop into a shrew. Don't we know the sure way to win the most bewitching smiles, and the sweetest "O, thank you, sir," from our fair young friends? A single rosebud from your garden will set them into a little flutter of delight and gratitude. We love roses. The old fashioned primrose always brings a remembrance of the homestead well, with its solemn, creaking sweep, where they grew in wild luxuriance. Perhaps the little Scotch roses are the daintiest of all the common varieties; but we confess a weakness for blush roses, and nowhere are they more beautiful than on the cheeks of our girls. Why don't they cultivate roses? Lilies are lovely, but more suggestive of heavenly gardens. Ah girls, girls! why will you be afraid of tan and freckles? They are charming, compared with sallow faces. Throw down your sickly books, your music and crocheting, and wield the hoe and rake and spade with bold and fearless energy among your roses? You will be thrice rewarded for your labors. Do you wish to be beautiful? What woman does not? Let the sun dye your cheeks with its own cosmetic, until you can vie with the heroine of poesy.—

"Queen Rose of all the rose garden of girls,"  
and you will no longer hear an old man, or a young one either complain—

"O, why do summer roses fade?"



# The Juvenile Instructor.

GEORGE Q. CANNON, : EDITOR.

AUGUST 15, 1868.

## EDITORIAL THOUGHTS.

I had the pleasure last Sunday of visiting the Sunday school in the 20th Ward, and we had much satisfaction in what we saw there. There were upwards of two hundred and twenty scholars present, as many as the school-room would comfortably hold. We noticed that this school differed from the other Sunday schools we had visited in the City—there were but very few large boys present, probably not half-a-dozen who were over fourteen years old. Brother Paul, the superintendent, explained this by saying that there is a smaller proportion of large boys in that Ward than in the others, many of the people who have settled there being newly married. All the boys who were able to work were away from their homes on the railroad and elsewhere. There were a number of young ladies present, and in visiting the various Sunday schools we have noticed that young ladies, as a rule, are more punctual and attend the schools in greater numbers than the young men.

After the scholars had finished their reading in classes, the school was called to order and we spoke to them in simple style for a few minutes, and then proceeded to ask them questions. Our questions were of a nature to test their knowledge of Jesus and the work of God in ancient days and of Joseph and the history of the Church in these latter days. Their replies were satisfactory, and considering the age of the children, their progress speaks well for the care which the superintendent, his assistants and the teachers have bestowed upon them.

There are many people who are very anxious to fill some very important mission. They would like to go and preach to the nations, and they feel as though they have no opportunity of showing their talents or of doing good, because they are not called to go abroad. This is a great mistake. There is a very large field for the employment of talent all around us. Laborers are wanted. We have multitudes of intelligent children who need teaching. Not like the world, few of whom receive the truth, their minds are prepared to receive every pure principle. Time spent in imparting these to them is well spent, and the fruits are most gratifying. Young men and women who devote their time on Sundays to teaching are doing a greater work for themselves and for Zion than if they were laboring in the ministry abroad the same number of hours per week. This is one of the most important and interesting missions any person could desire.

NAPOLÉON once entered a cathedral and saw twelve silver statues.

"What are these?" said the Emperor.

"The twelve apostles," was the reply.

"Well," said he, "take them down, melt them, coin them into money, and let them go about doing good, as their Master did."

## Man and his Varieties,

For the Juvenile Instructor.

### THEORIES ON THE ORIGIN OF MAN.

WHEN our little readers from the various settlements visit Salt Lake City to attend Conference, they see thousands of Saints who have been gathered together from almost every part of the world. While sitting in meeting and looking upon the vast congregation, they have, no doubt, noticed how different the Saints gathered from one nation look, to those brought from other nations. Yet it is hard for them to tell exactly where the difference lies; still, they often fancy they can tell by looking at a brother or sister, if he or she comes from England, Scotland, Denmark, Switzerland or Germany. After meeting, should they walk down Main Street, they may perchance meet a Negro, a Chinaman, a Mexican, or an Indian. How different these appear to the Saints they have been looking at in meeting; yet they all have two eyes, two ears, a nose, mouth, chin, cheeks, forehead, head, neck, body, arms and legs. All are made about the same. Then where is the difference, and what has caused it? Do our little friends ever think of these things, and wonder why all men are not alike? either all white, or all black, or all copper colored. We have no doubt they do think of these things, and we will now try to tell them through the pages of the JUVENILE INSTRUCTOR, some of the reasons that have caused this great diversity of appearance in the different races of the human family. In doing this, we shall have to refer to many different countries, and as we shall not always have time to tell where they lie, we must beg our little friends to get their maps and look where they are to be found, or to ask their parents or teachers about them.

First, however, we must say something about a few strange ideas that learned men entertain, regarding the origin of mankind. Some believe that when God placed Adam and Eve on the earth, he created quite a number of other families of men and women, and brought them to the earth at the same time. Some of these, they fancy, were more degraded, less intelligent and less capable of improvement than others and from these different families sprung the different races of men now on the earth. The European having sprung, according to their ideas, from the most intelligent family God then made, the Negro from the most degraded. Some, however, suppose that there are only three distinct races of men, others five, others many more. The most popular idea is that there are five races of men, whom they call the CAUCASIAN, the MONGOLIAN, the NEGRO, the MALAYAN and the AMERICAN races. We will tell you about these presently. There is another set of learned men who believe in what is called the development theory. Their idea is a very strange one. They say that men and women are merely an improved race of monkeys, or what amounts to the same thing. The monkeys, they say, have arisen by what they term natural selection from animals less intelligent than they are, and so on they trace the origin of man back until they come to the lowest orders of living things. Why they reason this way is because, they say, the gorilla and other finely developed species of monkeys live in or near the same countries as the most degraded races of men reside; and that the language of these people is little better than the chattering of the monkey, and, in their habits, they are not far removed from them; in fact, that the Bushman or Hottentot of South Africa is nearer in looks and habits to the monkey than he is to the refined European or American. But, from him, there is a



gradual chain upwards that links him to these civilized people; and another chain downwards that links him to the monkeys, and from them to the beasts, birds and fishes, that live on the earth, that fly in the air or swim in the water around him. Is not this idea ridiculous to those who know by revelation that men are the sons of God, not the improved descendants of monkeys, mice or oysters? These different opinions amongst learned but uninspired men arise from their not being willing to believe in the revelations of God; but, seeing so great a difference in the various families of man, they in their own wisdom try to find out the cause, and, not being enlightened by the holy spirit of God, they bring forth the most absurd ideas and teach them as truth.



One of the arguments most favored by those who believe that there are several distinct races of men, is that the difference of climate, food, civilization and other outward circumstances could never have caused the diversity in intelligence, habits, appearance and color that we now see around us, during the five or six thousand years men have been upon the earth. But there is a cause, the greatest cause of all in bringing about this difference that they know nothing about or will not recognize. It is the effect the blessing or curse of the Lord has upon any people. All who believe the sacred records given to us in these days, know how easy it is for men when they depart from the service of the true God to descend from the highest and purest forms of life to the lowest and most degraded.

The book of Mormon most expressly teaches that the Indians of this continent are of the house of Israel. From Patagonia to Alaska they are but different branches of the same great family. It tells us also that, like the rest of Israel, they were once a white and beautiful people; but their great and abominable sins brought upon them the anger and curse of God. When they turned from His laws to sin and death, they dwindled in intelligence, a skin of darkness came upon them, and they fell from their beauty and strength to be what we see they are to-day. What we want to impress upon you, little friends, is how quickly this great change was brought about. Many years after the coming of Christ their prophet Nephi says of them: "they did wax strong and did multiply exceeding fast, and became an exceeding fair and delightful people." Further on he says: "there was no contention in the land

because of the love of God which did dwell in the hearts of the people. And there were no envyings, nor strifes, nor tumults, nor whoredoms, nor lyings, nor murders \* \* \* and surely there could not be a happier people among all the people who had been created by the hand of God." This was one hundred and ten years after the coming of the Redeemer. This is the picture of the forefathers of the Indians at that time. How the love of God moulded their faces in beauty, and obedience to his laws gave them health and vigor, is not difficult for Latter-day Saints to understand. But this bright picture soon faded, this blessed period of their history soon passed away. Little by little they turned from God. Contentions arose, murders became frequent, men bound themselves together by sacred oaths to commit the most abominable sins, and a most blood-thirsty and cruel war desolated the land. This condition of things continued until about four hundred and twenty years after Christ, when the inspired record of their history closes. The Lamanites, who were an exceedingly cruel and savage race of beings, had then entirely destroyed the better portion of the people called Nephites.

From this time until Columbus landed on these shores, or about one thousand and seventy years, we know little of their history. What did he find the inhabitants of this land? The same dark, degraded people we are acquainted with, with but very indistinct traditions of their former greatness. True, some had not fallen to such depths of degradation as others. The Mexicans and Peruvians were not so far down in the scale as many of the tribes north and south of them, yet they had sunk far below the level of their ancestors in the days when they worshiped the Great Spirit in purity and truth.

With this evidence before our eyes of what the anger of the Lord will bring upon a people in one thousand years, we can readily understand that the same cause would bring about much greater changes in the four thousand years that have elapsed since the Flood. In fact, as great a difference as we see around us in the various families of man. Could the learned in the wisdom of the world realize this, they would stop talking of various races of mankind that have sprung from various origins.

(To be Continued)

## Chemistry of Common Things.

For the Juvenile Instructor.

### SOAP.

THE human skin is covered with very small pores or tubes, which are necessary for perspiration; and, as some assert, "to inhale atmospheric food through." They pass through the skin into certain glands, the office of which is to secrete, or separate water from the blood. It is said that considerably more than three thousand of these little tubes are found in a square inch of skin; no wonder, then, that dirt impedes their functions. They are natural outlets for many impurities which have to be removed to preserve health, and the means also, of preventing the body from becoming over-heated; for they promote evaporation, which produces cold by the removal of caloric. Sometimes these pores are stopped by a sudden chill; a natural effort is then made to get rid of the excretion, which ought to pass through the skin, in other ways; difficult breathing and an unpleasant discharge from the nose inform us that we have taken cold—the pores are stopped. More often they are obstructed by an accumulation of matter which soap and



water would remove; this is why washing the body is conducive to health.

Besides these pores, there are others which secrete an oily kind of fluid to lubricate the skin, to make it soft and pliable. These get blocked up, and little black pimples disfigure the face. Sometimes, when greatly neglected, a small insect takes up its abode in the skin, and small particles of dust adhere to the oily matter, forming, in time, a layer of matter which is insoluble in water. This is why soap is necessary.

Soap is, in chemical language, a salt. It is formed by the union of an acid and alkali. Fat is composed, as we have seen, of carbon, hydrogen and oxygen; but it is not a mere mixture of these elements, it is compounded into two distinct bodies: a fatty acid and an oxide, named stearic acid, and oxide of glycerine. When soap is made, an alkali is added to the fatty matter, in water; the alkali has an affinity for the fatty acid, and combines with it, setting free the glycerine—a sweet, yellow, incombustible fluid, differing altogether in its nature from fat. Soap may also be prepared from oil; a substance called oleic acid, in this case, unites with the alkali to form soap. These soaps are called respectively, stearate of soda, or of potash, according to the alkali used; or oleate of soda, or of potash; the soda forming hard soaps, the potash soft.

If any person would be an amateur soap-maker, take one fourth of an ounce of caustic soda, (the common carbonate will not answer, because it is not caustic,) dissolve in two ounces of water; this will make a strong lye. Also take the same quantity of caustic soda, and double the quantity of water, to make a weak lye. Boil three ounces of beef suet—hard fat—in the weak lye for half an hour, then gradually add the strong lye. After a time the fat and alkali of the lye will have formed a mass of gluey consistency. When it has become firm and flaky in appearance, which you can prove by pinching a little between your thumb and finger, add to the mass a little common salt. This will gradually separate the soap from the lye, for soap is insoluble in salt water; then set by till cold. The soap will form a hard mass, and the under-lye will lose its caustic properties; it is then water, glycerine and common salt. If caustic potash (concentrated lye) is used, the same proportions will produce a soft soap. Should the lye made from wood ashes be used, it may be made caustic by throwing into it a little fresh lime (lime newly burned;) this combines with the carbonic acid. This lye has to be used when fresh made, or, it rapidly absorbs carbonic acid from the atmosphere and loses its caustic properties. If we would ascertain whether soap is properly made, cut it up in small pieces and boil it down; if it is perfectly clear in solution, the fat is all converted into soap; if the solution is cloudy, there is uncombined fat, and more alkali is required. If soap is re-boiled, it may be perfumed according to fancy; bran may be added to make a useful article for the hands. The young experimentalist may make a soap of great beauty by dissolving hard soap in alcohol or whisky. This forms a transparent soap which will not injure the most sensitive skin. By adding to this, while liquid, camphor and ammonia, the opodeldoo of the chemists' shops is made. Soap which contains much free alkali, that is, uncombined alkali, should not be used for the skin. The skin is formed of gelatine, which, although insoluble in cold water, is acted upon when alkalies are used. Thus the outer skin is chapped and the face made rough. The hard, soda soaps are best for the skin; it may require more patience to use, but clean, white, beautiful hands will be the reward. Such soaps, with pure creek water, are the best beautifiers of the complexion.

A great chemist has said, that "the quantity of soap used in a country, is a test of civilization." This, certainly, might also be said of individuals. Look at those who keep the skin in a clean, healthy state, and whose linen is beautifully

white; then cast your eye on some who, from choice, know not the luxury of cleanliness; it will not take long to determine who are the higher in the scale of civilization. A dirty man is an unhealthy man, to say nothing of his being disagreeable to himself and others. The air is filled with minute particles of carbon which blacken the face; dust will penetrate through our clothing, the movements to which our bodies are subject, wear out and break into fragments the outer skin, and perspiration and oily matter cement the whole together. For this, soap is a solvent. When our linen is soiled soap is also used. The chemistry of its use is simple: soap is soluble in water, and free alkali, held in solution, combines with any greasy particles and, in fact, *forms* soap. This is why the washer puts in soda or saleratus—to form more soap. The soap keeps the linen soft and pliable, which pure alkali would not do, and everything which is soluble in water is removed.

There are many different kinds of soap, frequently called by names which have no reference to their composition. Thus, honey-soap contains no honey; Iodine-soap contains soda, which is manufactured from the ashes of sea weeds, which contain iodine; hence, its name. Naples soap is made in New York and other large cities; Castile soap does not come from Spain. These are fictions in trade, to suit the purchaser and enrich the maker. Glycerine soap really does contain glycerine; all our home-made soaps contain that useful article. Should we wish, to remove it, we can do so, by adding common salt to the soap, after it is properly made. The chemical action of salt is this: the potash, which has already united with the fatty acid to form soap, separates from that acid and unites itself to the chlorine of the common salt; the soda, which has left the chlorine, unites itself to the forsaken fatty acid and forms soda soap. The glycerine, which was mechanically mixed up with the potash soap, will now be found in the under-lye; that is, in the water under the soap when it is set. The potash will be there also, in union with chlorine, and all the impurities of the soap.

In soap making, as in all other chemical operations, practice makes perfect. Many truths may be learned by the young experimenter, which will be of great value in other manipulations. Order obtains in all the movements of those elements which he has to handle, *exact proportions* in all combinations. In the first experiment of soap making, salt is used to separate soap from the under-lye, which it does, because soap is insoluble (will not dissolve) in salt water. In this latter process the salt acts differently; the potash *prefers* chlorine, and the soda, for want of something else to do, has to take the fatty acid. This is by virtue of a law, or mode of operation, belonging to things in nature; it is called elective affinity. This, and many other things, will be learned in practice as well as in theory, if we begin to handle the elements, which, so far as organic products are concerned, are few in number; being chiefly carbon, oxygen, hydrogen and nitrogen.

More could be said about soaps: there is rosin-soap, made from rosin, which behaves like the fatty acids with alkali; and there are fancy soaps which have fatty or oily acids, with alkali for their base. There is another class of insoluble soaps, for pharmaceutical purposes (for use in medicine;) they are prepared with lead. There are natural soaps, the juices of certain plants and certain earths; they are used by the fuller in cleansing cloth; and sometimes an animal secretion named gall is used. In the chemistry of the stomach, this alkaline fluid prepares fatty matter for digestion, by making it soluble in water; it also softens the acrid juices, and prevents them from griping the intestines. For this, and other reasons, soap is prescribed by the physician occasionally. With the *moral* effects resulting from the use, or neglect of soap, the chemist has nothing to do; or, it could be said, that there is such complete sympathy between body and mind that, in proportion to



the physical perfection and purity of one, so is the freedom, vigor and beauty of the other!

BETH.

## Biography.

### JOSEPH SMITH, THE PROPHET.



OUR last number closed with a prediction of Joseph's. He prophesied "that the Saints would continue to suffer much affliction, and would be driven to the Rocky Mountains, many would apostatize, others would be put to death by our persecutors, or lose their lives in consequence of exposure or disease, and some of you will live to assist in making settlements and building cities, and see the Saints become a mighty people in the midst of the Rocky Mountains."

This prediction was delivered August 6th, 1842. Few could realize then that it would be fulfilled in so short a time. The Saints continued to suffer much affliction, many apostatized, others were killed by their persecutors, others lost their lives through exposure, being driven away from their homes by mobs, and others have lived to reach the Rocky Mountains, have assisted in making settlements and building cities, and have seen the Saints become a mighty people here. Joseph himself did not live in the flesh to see his own prediction fulfilled; but we live to see it brought to pass even as he spoke it, and we should be thankful to the Lord for permitting us to exist in a day when His word has been revealed to His servants and they have made it public.

Great excitement had been raised throughout the States by the falsehoods put in circulation by John C. Bennett and others. Joseph felt that it was wisdom in God that the elders should go forth and deluge the States with a flood of truth. He wished them to set forth in plain terms the mean, contemptible, persecuting conduct of ex-governor Boggs, of Missouri, and those connected with him in his corrupt proceedings, so that the world might understand the course taken by the enemies of the Saints. He advised the Twelve to call a special Conference on the 29th of August, 1842, to give instructions to the elders who should be selected for this important mission.

During these days Joseph had to keep himself concealed from his enemies. They were anxious to get hold of him. But on the day of this Conference he made his appearance on the stand, much to the delight of the people. Various opinions had been indulged in as to where he was; some had supposed that he had gone to Washington, others that he had started to Europe, and others that he was in the city. He and the people were all filled with thanksgiving and rejoicing to be together in conference again. He congratulated the people on the victory he had once more gained over the Missourians. He had not fought them with the sword, or with carnal weapons; he had done it by stratagem, by outwitting them. There had been no lives lost, and there would be no lives lost, if they would hearken to his counsel. Up to this day, he said, God had given him wisdom to save the people who took counsel. None had ever been killed who followed his counsel. He said, "we want to whip the world mentally, and they will whip themselves physically."

After Joseph's address an indescribable transport of good feeling was manifested by the assembly, and about three hundred and eighty elders volunteered to go on the proposed mission.

On September 1st he wrote an address to the Saints on the subject of baptism for the dead. In that address he informed the Saints that inasmuch as the Lord had revealed to him that his enemies, both in Missouri and Illinois, were again in pursuit of him, for his own safety and the safety of the people he had thought it wisdom to leave Nauvoo for a short season. He wrote cheerfully and encouragingly to them, saying that he gloried in tribulation. On the third of that month a deputy sheriff and two other men came, in a sneaking manner, and stole into Joseph's house. Though they had no search warrant, they insisted on searching the house; but they did not find him. This conduct of theirs was in direct violation of the Constitution of the United States; but what did they care? Joseph was what they would call "the Mormon Prophet," and they would do as they pleased with him, law or no law. They were well armed, and they had said they intended to take him dead or alive. But the Lord delivered him out of their hands, for as they came into his house Joseph passed out of the back door, and through the corn in his garden to Bishop Newel K. Whitney's. It was said there were fifteen of them altogether, and they started from Quincy with the intention of reaching Nauvoo in the night and falling upon the house unawares; but it was reported they lost the road and got scattered and could not get along until daylight. After night Joseph left Bishop Whitney's, which was too public and exposed, and went to Brother Edward Hunter's.

On the 6th Joseph wrote another epistle to the Saints, giving further instructions respecting baptism for the dead. This made a deep and solemn impression on the Saints, and they manifested their intention to obey the instructions to the letter. Joseph sent word to those of the Twelve who were going on missions that he wished them to labor in Illinois and to preach against mobocracy. On the 10th he concluded to return to his own house again, thinking he would be safe there. On the 2nd of October word reached Nauvoo that Governor Carlin had offered a reward of \$200 for Joseph, and \$200 for Orrin Porter Rockwell. Governor Reynolds of Missouri also offered a reward of \$300 apiece for them. Carlin was determined to have Joseph—if he could be taken—carried to Missouri.

Reports from various quarters reached Joseph that Carlin intended to have him arrested with an illegal writ, hoping to draw him to Carthage to get acquitted by *habeas corpus* by Judge Stephen A. Douglas; then he would have men waiting with a legal writ to serve on him as soon as he was released under the other one, and bear him away, without further ceremony, to Missouri. Many of the Missourians were also coming to unite with the militia of Illinois of their own free will, and at their own expense, so that if they did not take him there, they would come and search the city. These were reports only; but Joseph knew very well that his enemies were capable of taking these measures to get him into their power, or any others that might be suggested to them. On October 7th he concluded to leave his home again for a short season. After a tedious journey of one night and part of a day, which he made in the company of several of the brethren, he reached Father Taylor's, the father of Elder John Taylor. He remained there nearly two weeks and then he returned to Nauvoo to see his wife whom he left sick. He went back to Father Taylor's the next day and stayed another week. On the 28th of October he returned to Nauvoo. The Saints were much rejoiced to see their Prophet again in their midst. It was through such scenes as these that Joseph constantly passed to establish that gospel which we enjoy so peacefully.



*For the Juvenile Instructor.*

## MOUNTAINS.

0 THE mountains, the beautiful, picturesque mountains,

"That wear their caps of snow  
In very presence of the regal sun."

How they surround and tower above us! How grand and magnificent they appear, clothed in their robes of green and white! What rugged peaks and craggy precipices are found among them; what chasms and ravines in their midst! How like a mighty wall they seem to be around our city, as we are thus shut out from the busy world beyond.

There is a charm connected with mountains, and a wonder that we can hardly express. To see them pinnaced above us, some of their peaks so high that, while we are suffering with almost intolerable heat, they are covered with snow, is a matter of wonder; as the first conclusion some of us would arrive at would be, that they are nearer the sun, and hence we would naturally suppose their climate to be warmer. But it is not so; they are less exposed to the rays of the sun than if they were farther away.

When we behold their huge bulk and mighty forms we speculate as to what may be hidden in their depths; what curiosities there exist; what a wealth of gold and silver may be hidden up from the eyes of man, that may yet be revealed for wise and good purposes; perhaps to pave the streets of some great and magnificent city; perhaps to enrich a people who, through their goodness and faithfulness, have become worthy of such manifold blessings as God alone is capable of bestowing upon man.

Who does not love to look upon beautiful scenery—nature's own handiwork—and contemplate the wisdom and power of the great Being who is the Author of all; Him who caused the sea to flow upon dry land, and the mountains to rise out of level places.

I suppose most of the little juvenile readers have studied about mountains in their geographies. Many in the world are much higher than any we see here in Utah or America. And there are some ranges that are much larger than the Rocky Mountains. Mount Everest, one of the Himalaya mountains in India, is the highest peak in the world, it being 29,000 feet, or about five and a half miles in altitude. Mount St. Elias, in Russian America, is 17,860 in height; and is the highest point in North America. The Andes, in South America, are the longest range in the world. Traveling among those mountains is very dangerous. Their slopes are broken by many deep chasms and gorges; and the traveler must often follow narrow, slippery paths along their edges, and cross them on slender rope bridges. There are many volcanoes or burning mountains along the top of the Andes. Chimborazo is one of the most noted. The Alps, in Switzerland, famous in the records of military achievements as having been crossed by the armies of Hannibal and Napoleon, and noted for the grandeur and magnificence of their scenery, are the most celebrated of all mountains, and the highest in Europe. Mount Blanc, the highest peak, is an enormous mass of granite, reaching the height of 15,750 feet; and, by the surrounding walls of ice, fearful precipices and the everlasting snows, by which it is covered, the ascent is rendered exceedingly difficult and dangerous, and we often read of people losing their lives in attempting to reach the top of this mountain; yet its summit has often been reached by adventurous men and tourists.

People who live among mountains are generally a liberty-loving people, and are noted for their freedom and bravery. They love their mountain homes, and would shield them from danger at almost any risk. The Alps of Switzerland, the Highlands of

Scotland, and the mountains of Asia are all noted for the free and independent people who inhabit them. And the Latter-day Saints, to whom God in his wisdom and goodness has seen fit to give a home among the Rocky Mountains, are, too, a liberty-loving and patriotic people; and if they continue to live righteously, revere Him and keep His commandments, they will yet become a great and mighty nation. **RANTHA.**

*For the Juvenile Instructor.*

## CATECHISM

FOR OUR JUVENILES TO ANSWER.

Republished from No. 13. with their answers:—

131. Who were set apart for the first mission to Europe?  
Elders Heber C. Kimball, Orson Hyde and Willard Richards, and Priest Joseph Fielding.
132. When did they start from Kirtland?  
June 13th, 1837.
133. What was President Kimball called, even by leading Elders, before leaving Kirtland, for going on the mission?  
He was ridiculed and called a fool for listening to Joseph and being willing to go on his foreign mission.
134. Who joined the brethren named at New York?  
Elders John Goodson and Isaac Russell, and Priest John Snider.
135. When did they sail from New York for Liverpool, in England?  
On the 1st of July, 1837.
136. When did they arrive at Liverpool?  
On the 20th of the same month.
137. Who jumped into a small boat and were rowed ashore?  
H. C. Kimball, O. Hyde, W. Richards and J. Goodson.
138. To what place did they proceed from Liverpool?  
To Preston.
139. What words were on the flag which they saw as they alighted from the coach in Preston?  
"Truth will prevail."
140. Who turned the key that opened the gospel door to the eastern hemisphere?  
President Heber C. Kimball.

*For the Juvenile Instructor.*

## CHARADE.

BY J. E. SHELLEY

I am composed of 10 letters.  
My 2, 4, 5, 10 are insects.  
My 7, 9, 6, is used in sickness.  
My 1, 8, 4, is the ruler of the day.  
My 8, 4, 3, 5 is equal to one.  
My whole is a city in the Western States.

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